

## REMARKS

In the Office Action, claims 6 and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicant's Admitted Prior Art (Fig. 7 and spec. pages 1-3) in view of Tanaka. Claims 5 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Winters in view of Havens (U.S. Pat. No. 4,039,741).

Claims 5, 6, 13 and 14 have been amended to change "said plasma seal being made entirely of polyterafluoroethylene" to --said plasma seal being made entirely of a non-filler type of polytetrafluoroethylene--, and changed from "a packing made of a rubber-like elastic material" to --a packing made of a plasma resistant FKM rubber containing no mineral component--.

The materials specified in the claims restrain particles from being generated, even if these materials are subject to plasma irradiation, in comparison with a PTFE containing a filler and an FKM rubber containing a filler. Furthermore, these materials generate little deformation by vacuum suction.

The above definition of materials are not disclosed or suggested in the Tanaka Patent (U.S. Patent No. 6,730,385), the Winters Patent (U.S. Patent No. 6,165,313), and the Havens Patent (U.S. Patent No. 4,039,741) and the definition of materials cannot be obtained by any combinations of them.

The O-ring of the Tanaka patent is a laminate comprising a layer 2 of perfluororubber and a layer 1 of other rubber. However, the perfluororubber is not

PTFE (polytetrafluoroethylene). Since the chemical formula of the perfluororubber described in the specification of the Tanaka patent contains oxygen, the perfluororubber is not PTFE. PTFE has a melting point of 327°C. PTFE cannot be fluidized at a temperature below 200°C in the embodiment of the Tanaka patent.

The invention of the Tanaka patent has the features in which the perfluororubber and other rubber are bonded to each other by curing. Since PTFE cannot be cured, it is evident that perfluororubber of the Tanaka patent does not contain PTFE. In addition, the Tanaka patent exemplifies an O-ring containing perfluororubber in the embodiment in the specification. This O-ring will be a low plasma resisting performance.

Since the O-ring of the Tanaka patent contains carbon, the O-ring is not made of a non-filler type material. Also, since the FKM rubber contains an MT carbon in the embodiment, the FKM rubber contains a mineral component. The Tanaka patent states that all compositions for curing may contain any generally used fillers. Examples of mineral fillers include a carbon, a titanium oxide, or a silica. (Since a carbon black is a “carbon element”, the carbon black is generally deemed to be a “mineral component”.)

The Tanaka patent suggests in Comparing Examples 2, 5, and 8 that a sufficient adhesion cannot be obtained in the case where the laminate is not

provided with adhesive layers. The Tanaka patent does not take into consideration mechanical adhesion.

The Winters patent discloses a plasma resistant seal 232. However, the plasma seal 232 includes a core 236 made of an elastomer and a jacket 234 made of a fluorocarbon polymer and covering the core 236 (see the description from column 7, line 55 to column 8, line 19 and Figure 6). Since the elastomer is not PTFE, the whole plasma seal 232 is not made of PTFE. Furthermore, claim 1 in the Winters patent specifies that the sealing and blocking O-rings have different material compositions. The Winters patent neither discloses nor suggests that the plasma seal 232 is made of the same material.

Even if the plasma seal 232 is changed from a circular cross section to a rectangular cross section, since the whole plasma seal 232 is not made of PTFE, the plasma seal 232 will be readily deformed when it is subject to a pressure difference due to vacuum suction, if the plasma seal 232 is disposed in a position shown in Figure 7. Accordingly, it is impossible to prevent the plasma seal 232 from protruding.

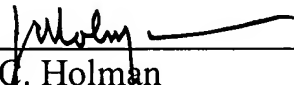
The Havens patent discloses a gasket made of a metal (beryllium steel). The gasket in the Havens patent cannot be utilized in the semiconductor industrial field and the like.

Based on the foregoing amendments and remarks, it is respectfully submitted that the claims in the present application, as they now stand, patentably distinguish over the references cited and applied by the Examiner and are, therefore, in condition for allowance. A Notice of Allowance is in order, and such favorable action and reconsideration are respectfully requested.

However, if after reviewing the above amendments and remarks, the Examiner has any questions or comments, she is cordially invited to contact the undersigned attorneys.

Respectfully submitted,

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